

STEP-BY-STEP

process to mainstream a
gender component in **climate-
smart agriculture initiatives**
for **Guatemala**.

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Acronyms

CCAFS: CGIAR Research Program on Climate Change, Agriculture and Food Security.

CGIAR: Consortium of research centers to increase food security, reduce rural poverty, improve human health and nutrition, and ensure a sustainable management of natural resources.

CIAT: International Center for Tropical Agriculture (CIAT).

COP: Conference of the Parties (COP) under the United Nations Framework Convention on Climate Change.

CSA: Climate-smart Agriculture.

CSV: Climate-smart Villages.

EASAC: Regional Strategy for Climate-smart Agriculture for the SICA Region (2018-2030).

ICT: Information and communications technologies.

IDRC: International Development Research Center.

MAGA: Guatemalan Ministry of Agriculture, Livestock and Food.

SAN: Food Security and Nutrition.

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- **Ministry of Agriculture, Livestock and Food (MAGA):** the Directorate for Planning (DIPLAN), the Directorate for Cooperation, Projects and Trusts (DCPF), the Directorate for Geographic, Strategic Information and Risk Management (DIGEGR), the Vice-ministry for Rural Economic Development (VIDER), the Gender Unit, Inter-cultural Development Unit, Climate Change Unit, Youth Section, Implementation Unit from the Forest and Water for Concord program (BYAC), the Directorate for Regional Coordination and Rural Extension (DICORER), especially extension workers in the departments of Sacatepéquez, Escuintla, and Chimaltenango.
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- **International organizations:** the World Food Program (WFP), the Food and Agriculture Organization of the United Nations (FAO), CARE International, the International Center for Tropical Agriculture (CIAT), the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

Glossary

Adaptation to climate change: adjustment in natural or human systems in response to actual or expected climate impacts or their effects, which could moderate harm or exploit beneficial aspects.¹

Climate change: a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere, which adds to the natural climate variability observed over comparable timeframes.²

Climate change adaptation strategy: series of actions or activities aimed at adjusting the natural and human systems to actual or expected climate impacts, and their effects.

Climate change mitigation: actions and initiatives to limit, reduce, or prevent greenhouse gas emissions, or to leverage their elimination from the atmosphere by carbon sinks.³

Climate-smart Agriculture (CSA): agriculture that sustainably increases productivity, resilience (adaptation), reduces/removes greenhouse gases (mitigation), where possible, and enhances achievement of national food security and development goals.⁴

Climate-smart Villages (CSV): the villages are in high-risk areas, which will likely suffer most from a changing climate. At CSVs, a steering group of community representatives and researchers together identify appropriate climate-smart agriculture (CSA) options for that village. These might include climate-smart technologies, climate information services, local development and adaptation plans and supportive institutions and policies, all tailored to that community's needs, striking a balance in terms of the roles of family members. Thus, the community prioritizes its options in a process that aims to be as participatory and inclusive as possible, encouraging women and more vulnerable groups to participate.⁵

Climate variability: variations to expected climate that are longer than weather events. It is a specific feature of climate and it is related to expressions such as “dry year” or “warm winter”⁶

Empowerment: in agriculture, empowerment is usually described as the capability of oneself to make decisions about matters associated to agriculture, as well as one's access to the material and social resources needed to carry out such decisions.⁷

Food security: at the individual, household, national, regional and global levels is achieved when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.⁸

Gender: roles, behaviors, activities, and attributes that a given society at a given time considers appropriate for men and women.⁹

Gender equality: equal rights, responsibilities and opportunities of women and men and girls and boys. Equality does not mean that women and men will become the same but that women's and men's rights, responsibilities and opportunities will not depend on whether they are born male or female. Gender equality implies that the interests, needs and priorities of both women and men are taken into consideration, recognizing the diversity of different groups of women and men.⁹

¹ MINAM (2016): Plan de Género y Cambio Climático.

² Convención Marco de las Naciones Unidas sobre el Cambio Climático (1992).

³ Framework Convention on Climate Change, UNFCCC (2009).

⁴ FAO (2010) “Climate-Smart Agriculture” Policies, Practices and Financing for Food Security, Adaptation and Mitigation.

⁵ CCAFS (2015): TeSAC: opciones para mejorar la resiliencia y la seguridad alimentaria.

⁶ Asociación Española de Climatología (2006): Vocabulario climático.

⁷ Alkire et al. (2013). The Women's Empowerment Index. Oxford Poverty & Human Development Initiative.

⁸ FAO (2006): Cumbre Mundial de la Alimentación.

⁹ UN Women. (2019): Gender Equality Glossary

Gender equity: application of differentiated treatment according to individual interests and needs, with the purpose of achieving the equality of outcomes. In the field of development, a gender equity goal often requires incorporating measures to compensate historical and social disadvantages suffered by women. Equity leads to equality.¹⁰

Gender mainstreaming: the process of assessing the implications for women and men of any planned action, including legislation, policies or programs, in any area and at all levels. It is a strategy for making the concerns and experiences of women as well as of men an integral part of the design, implementation, monitoring and evaluation of policies and programs in all political, economic and social spheres, so that women and men benefit equally, and inequality is not perpetuated. The ultimate goal of mainstreaming is to achieve gender equality.¹¹

Multiculturalism: principle that recognizes the existence of different cultures sharing the same physical, social, and geographical space. The principle of multiculturalism entails the right and respect to such cultural diversity and enables the establishment of culture and identity in themes of political duties and rights.

Resilience: ability of the territory to recover adequately when it is impossible to avoid the occurrence of an emergency or a disaster.¹²

Vulnerability to climate change: weakness or inability of the territory (ecosystem and communities) to absorb the effects of a threat without serious functional disruption.¹²

¹⁰ UNESCO (2009): Indicadores de cultura para el desarrollo. Igualdad de género y COMMCA (2016): Compilación de los instrumentos jurídicos y políticos sobre los derechos de las mujeres.

¹¹ ECOSOC, Naciones Unidas (1997): Mainstreaming the gender perspective into all policies and programmes in the United Nations system. Report of the Secretary-General.

¹² FAO. (2019): Plataforma de Territorios Inteligentes.

Background

With the purpose of addressing the threats that climate change poses to rural livelihoods, the Republic of Guatemala, together with the rest of the Central American region, has engaged in the design of adaptation and mitigation measures and policies to reduce emissions and adapt food production systems to reduce their vulnerability and increase their resilience at the national and regional level. Climate-smart agriculture policies and programs are among these measures that have been promoted, seeking to improve productivity and food security of agricultural systems, while enhancing adaptation and contributing to greenhouse gas mitigation. The approval of the **“Regional Strategy for Climate-smart Agriculture for the SICA Region (2018-2030)”** is an example of such initiatives at the regional level.

Among others, the CSA strategy (EASAC, its Spanish initials) for the SICA region proposes that “both men and women are guaranteed access to the opportunities and outcomes of climate-smart agricultural development in all areas”. To this effect, CSA projects should actively contribute to the identification and elimination of any potential discriminatory practices towards women, as well as the design and implementation of measures guaranteeing gender equality with the purpose of sustainably achieving the economic, social, political, and cultural development of the rural landscapes.

In this context, the climate change and gender units of the Guatemalan Ministry of Agriculture, Livestock and Food (MAGA, its Spanish initials) and the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) have been working jointly during the last years to provide the national agricultural sector with gender-sensitive tools that will help improve its adaptive capacity to the challenges posed by climate change.

Within the framework of the projects **“Generating evidence on gender-sensitive climate-smart agriculture to inform policy in Central America”** and **“Shaping equitable climate change policies for resilient food systems across Central America and the Caribbean”**¹³, during 2018 and 2019, a series of workshops was held at the national level with the purpose of strengthening the capacities of stakeholders to develop and implement agricultural projects integrating gender and climate change perspectives. The need to strengthen the inclusion of gender equality considerations in all phases of agricultural program and project design and implementation was emphasized during these activities, including the need to create more robust monitoring systems integrating gender indicator and measures focused on enhancing the adaptive capacity to cope with the impacts of climate change and variability.

It is within this context that MAGA and CCAFS joined efforts to prepare this guide as a practical tool to orient stakeholders at the national or sub-national level in designing, implementing, and monitoring interventions seeking to promote a climate-smart agriculture (CSA) so that they consider and reflect a gender equality approach.

¹³ Both projects are part of the research portfolio of the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) in Latin America and are being implemented by the International Center for Tropical Agriculture (CIAT). This work has been carried out with the support of a grant from the International Development Research Center (IDRC), Ottawa, Canada.

About this guide

Establishing the links between gender and climate change

Guatemala is among the top ten countries that have been most severely affected by climate risks in the long term, from 1996 to 2015 (Kreft, Eckstein, and Melchior, 2016), and climate forecasts for 2100 project considerable changes in temperature and variability in rainfall patterns for the Central American region (Magrin et al., 2014). Agriculture is not just one of the sectors hardest hit by climate change – due to the heavy dependence of production on climate factors – but also one of the sectors contributing the most to greenhouse gas emissions (Smith et al., 2014).

The way and degree to which people are affected by climate change and variability are partially the result of their poverty level, cultural beliefs, gender, as well as socioeconomic and power differences (Habtezion, 2013). These socioeconomic differences are visible, for example in Guatemala, where 12.6% of agricultural households are classified as “Landless”, 8.1% as “Sub-subsistence”, 39.5% as “Subsistence”, 13.2% as “Surplus”, while the rest corresponds to small and large producers (MAGA, 2016).

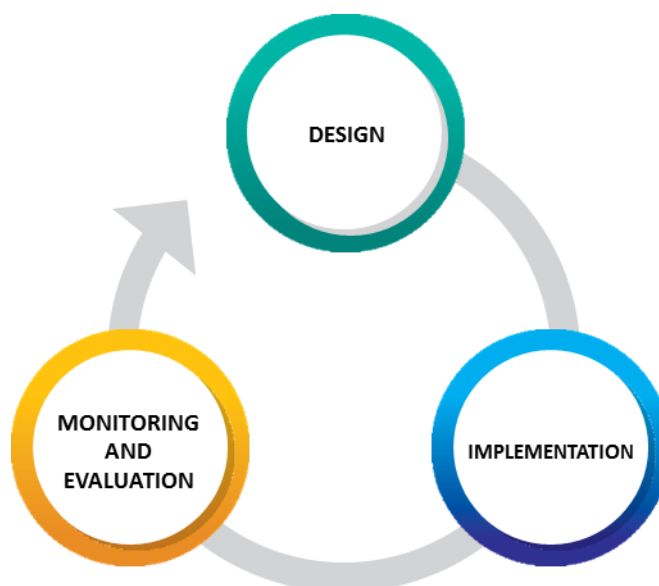
Social and gender inequalities already existing in the villages threaten to be accentuated considerably due to changes in weather patterns (Aguilar, 2010). For instance, in the last years, extreme poverty situations have been exacerbated by the negative impacts of climate change in the Central American region, which has forced many men, traditionally considered as the head of households, to migrate in search of better opportunities and leaving their families behind. This is affecting gender relations within the household, since women must now take on the work previously performed by their husbands, thus increasing their workload.

The large cultural diversity in Guatemala, with a total of 25 different linguistic communities, and large gender and social inequalities, make it imperative to mainstream a gender and multicultural perspective in all climate change adaptation and mitigation initiatives to be able to reduce and finally eliminate gender inequalities. This guide outlines the key considerations to take gender equality into account in climate-smart agriculture (CSA) interventions.

Objectives of this guide

This guide presents different considerations for the design, implementation, and monitoring and evaluation efforts of gender-sensitive climate-smart agriculture interventions, with the purpose of facilitating the work of development program designers, extension workers, and program officials.

In the short and medium term, this guide aims to contribute to climate-smart interventions introducing gender considerations in a comprehensive manner from the inception stage and throughout the entire project cycle, thus contributing to reduce gender inequalities in the agricultural sector.

FIGURE 1. Stages in the project cycle**The objectives of this guide include:**

- Strengthening the knowledge and raising awareness of stakeholders at the national or sub-national level on the importance of considering a gender and multicultural perspective in initiatives focusing on the adoption of climate-smart practices, technologies, and services.
- Setting out a practical step-by-step guide on how to mainstream gender considerations in the design, implementation, and monitoring stages of climate-smart agriculture interventions (e.g., programs or projects).
- Facilitating the efforts of extension workers to implement and monitor climate-smart agriculture activities with a gender perspective.
- Strengthening the capacities of any stakeholder interested in collecting systematic and comparable information about gender, food security, agriculture, and climate change.

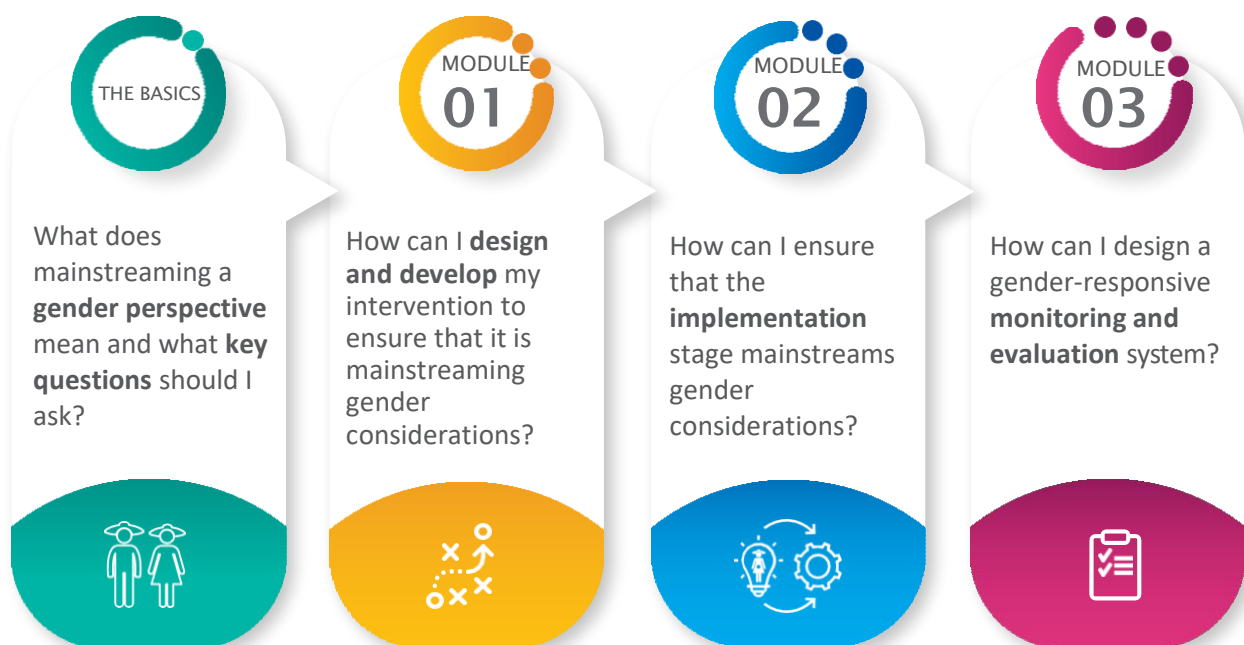
To whom is this guide addressed?

This guide has been designed to be used at different levels of intervention (at the national, sub-national, community, and village level, among others) and by a diverse audience, including:

- **Program designers, project developers.**
- **Extension workers, NGO officials.**
- **Monitoring and evaluation teams.**

Structure of this guide

This guide is divided in four sections that may be used jointly or separately, as required:



The Basics

What does mainstreaming a gender perspective mean and what key questions should I ask?

Objectives

1. Understanding the concept of gender and what we mean by mainstreaming gender considerations in climate-smart interventions.
2. Knowing the answers to key questions for different areas, according to the theme of the intervention.

What I need to know

Mastering the gender approach comprehensively will entail asking

Who among MEN and WOMEN...

uses...

benefits from... controls...

is included in...

is acquainted with... has access to...?

As well as follow-up questions, such as: How? Where? When? Why?

Given the high specificity of gender relations, the questions should always be adapted to the local context of our intervention. The design and analysis should also take into consideration the age, ethnic, cultural, and climate features of the different areas.



Remember

Including a gender perspective in my intervention should not be limited to assessing the situation, needs, and preferences of women, but it should also assess those of men. When including both men and women in the analysis, we can have a deeper understanding of the gender relations and thus we can design strategies to reduce gender inequalities in different areas.

Exploring the concept of gender

Gender is the social, historical, and cultural constructs that societies traditionally attribute to men and women. This is to say, the set of roles, responsibilities, rights, beliefs, and ideas that societies attribute to men and women within a specific context and society.

Do sex and gender mean the same thing?

It is common to find “sex” and “gender” as synonyms. However, sex refers to the biological features a man and a woman are born with, while gender refers to the features, roles, responsibilities, rights, beliefs, and ideas that society attributes to men and women.

While the biological features which men and women are born with (sex) remain constant, gender relations are not static, but vary over time. Gender relations evolve as culture does.





Therefore, we can say that gender *‘is made up, is developed’*, while sex *‘is born with’*.

Intersectionality of the gender concept

Gender is only one type of social differentiation, but there are many others. For instance, based on ethnicity, individuals are grouped according to their common origin, in terms of language, culture, traditions, or other. In Guatemala, there are four indigenous peoples: Maya, Garifuna, Xinka, and Mestizo, which comprise a total of 25 different linguistic communities. Age, religion, and economic status are other examples of social differentiation.

These types of social differentiation can be interrelated in what is known as *intersectionality*. For instance, in Guatemala, among people over 15 years, indigenous women have an average of 1.2 years less schooling than indigenous men. If we compare the level of schooling between indigenous and non-indigenous women, we see that indigenous women have an average of 2.3 years less schooling. Thus, being a woman and being of indigenous origin is a double source of inequality in terms of schooling.

Table 1. Average of schooling years by sex, ethnicity, and age group. Year 2011.

Sex		✓ Indigenous	✗ Non-indigenous
Individuals over 15 years of age			
Men		4.2	5.9
Women		3.0	5.3
Individuals between 15 and 24 years of age			
Men		6.0	7.1
Women		5.1	7.0

Source: National Statistics Institute, Guatemala (2014).

Similarly, women of a particular ethnicity might have preferences or face challenges that women of other ethnicity might not. Young women may present very different circumstances and preferences than older women. Each group of men and women will thus present a set of needs, preferences, and priorities, according to their social characteristics (age, ethnicity, gender, etc.) Therefore, it is important not to generalize when we talk about “women” or “men”, since they are not a homogeneous group. This is particularly important in Guatemala, given its wide cultural diversity.

Difference between gender equality and gender equity

It is common to find the terms gender equality and equity used interchangeably. In fact, both terms are related.

- **Gender equality** entails equal rights, responsibilities, and opportunities of all men and women, regardless of their sex. It implies taking into account the interests, priorities, and needs of different groups of men and women.
- **Gender equity** entails differential treatment to men and women to achieve equal rights, benefits, duties, and opportunities. In agricultural and rural development, it is often needed to incorporate measures and projects to benefit women specifically, with the purpose of compensating for the cultural and historical disadvantages women

have had to face. Thus, gender equity may be understood as the way to achieve gender equality. Equity leads to equality.

What does mainstreaming a gender approach mean?

In general, mainstreaming a gender approach in our interventions involves raising three fundamental questions:

What is the situation between men and women?

Are there differences or inequalities between men and women?

What can we do to address existing inequalities?

Knowing if there are differences or inequalities between men and women will in turn involve asking a series of more specific questions:

Who among MEN and WOMEN...

uses...

benefits from... controls...

is included in...

is acquainted with... has access to...?

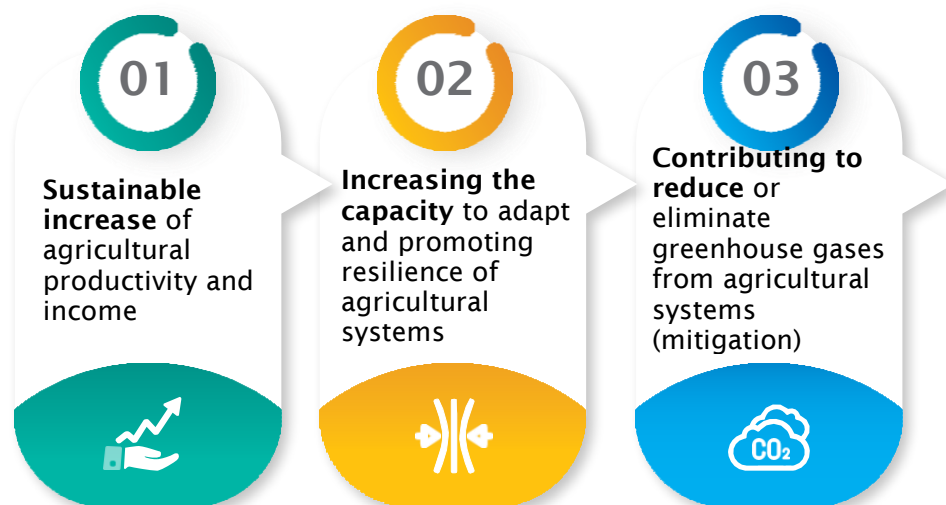
Each of these questions should be reinforced with these follow-up questions:

In what way? How? Where? When? Why?

The analytical dimensions of gender in climate-smart agriculture

Climate-smart agriculture (CSA) is a comprehensive approach seeking to strengthen policies and interventions linking the agricultural sector with climate change, with the purpose of reducing the vulnerability of villages and their inhabitants to climate variability and render them more resilient.

CSA initiatives are based on **three pillars** helping to achieve food and nutritional security:



The comprehensive approach of CSA allows its application at different scales: from the most local initiatives to a national and global level. CSA initiatives are not limited to practices and technologies, but they also integrate systemic approaches (e.g., value chain and landscape management) and require a series of conditions that facilitate the creation of an enabling environment (e.g., index-based insurance, meteorological information systems, infrastructure, policy or institutional arrangement commitments).

For instance, the CSA approach may be operationalized through the development and implementation of policies or plans seeking to enhance the capacity to adapt and mitigate climate change, while improving agricultural productivity and food security. At a more local level, CSA can also be encouraged through the promotion of different practices and technologies and by strengthening the capacities of producers and extension workers to be able to implement such practices. Climate information services, for instance, will allow for an improved climatic forecasting capacity and to analyze how such forecasts can affect crops for men and women to be better prepared to cope with their impacts.

The following table shows a list of examples of CSA practices, technologies, and services currently being developed in Climate-smart Villages (CSV) in Guatemala.

Table 2. List of CSA practices, technologies, and services implemented in the climate-smart village of Olopa, Department of Chiquimula (Guatemala).

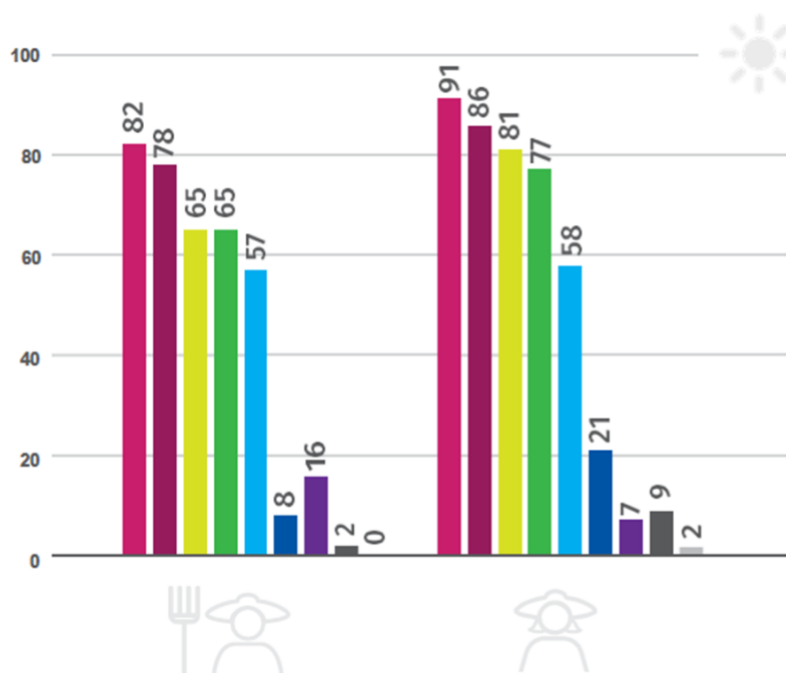
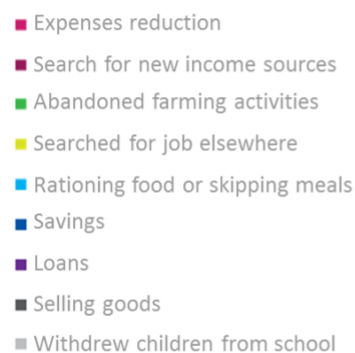
Name of the CSA practice, technology, or service	Description
Climate-smart vegetable gardens (Using water harvesting)	This measure corresponds to home gardens planted with different crops and irrigation from water harvesting. It is a CSA practice, because it encourages the diversification of production, enhances the adaptation of the species planted in the garden, and improves household food security.

Preparation and use of organic fertilizers	This measure corresponds to the preparation of fertilizers using by-products of the farm. It is considered as a CSA practice, because it reduces the costs of production and contributes to increase the trading prices of produce, thus increasing the income of farmers. In addition, it contributes to the reduction of greenhouse gases, mainly from nitrogen fertilizers.
Seeds of improved varieties (Drought-tolerant seeds and biofortified beans)	This measure seeks to reduce the risk of severe losses at harvest, as a consequence of droughts. Likewise, it improves the nutritional content of beans. It is considered a CSA practice, because during dry periods it can help improve the income of producers and ensure household food security.
Drip irrigation	This measure consists of the use of an irrigation system that uses a small volume of water localized in such a way that it supplies water mainly to the area where crop roots develop, which helps the plant make a better use of water. It is a CSA practice, because it reduces the vulnerability of crops and may contribute to improve household incomes in dry periods.
Intercropping	This practice consists of planting different crops in the same physical space, in search of diversifying production, harnessing the benefits that a crop might generate in comparison to another crop and reducing the use of inputs. It is a CSA practice, because diversifying production increases the possibility of obtaining yields during periods of drought or excessive rainfall, and reduces emissions by reducing the use of fertilizers.
Crop rotation (Combination of leguminous and non-leguminous species)	This practice consists of rotating the crops planted in plots, trying not to have more than two continuous cycles of the same crop in the site. It is a CSA practice, because by using leguminous species (e.g., beans), nitrogen is fixed in the soil, which reduces the use of nitrogen fertilizers and the corresponding emissions. Similarly, it enhances the adaptation of crops, as rotation breaks some disease cycles and reduces input consumption.
Local Technical Agroclimatic Committees (LTACs)	This CSA service is based on the dialogue process between a group of local actors (from different institutions and expertise), who jointly study the potential behavior of climate in an area or village and collectively seek to draft recommendations to help male and female producers to reduce their vulnerability to the predicted climate variability. On the basis of such dialogues and weather forecasts in the country, the local technical agroclimatic committees prepare climate forecasts on a regular basis, and analyze the potential impact on crops in that area, and also draft recommendations to adapt to them. Such forecasts and recommendations are then distributed in local agroclimatic newsletters through local technicians and producers.

Source: CCAFS 2019, Giraldo-Méndez et al. (2018), Loboguerrero et al. (2018).

It is important to assess the socioeconomic conditions for each one of the three climate-smart agriculture pillars, as they may be different for men and women of different social status within a climate change context. For instance, in the Olopa CSV (Department of Chiquimula, Guatemala), CCAFS researchers discovered that in the face of droughts, men and women resort to different response mechanisms at different times (Figure 2). For instance, while 21% of women indicated having had to resort to their savings to face droughts, only an 8% of men reported using their savings for this. Conversely, 16% of men, compared to 7% of women, indicated having resorted to loans to cope with the dry spell (Bonilla-Findji et al, 2018). These preliminary results suggest, for instance, that it may be harder for women to access loans and face climate variability events, compared to men.



Figure 2. Adaptive responses of men and women to drought in Olopa (Department of Chiquimula, Guatemala)





Source: Bonilla-Findji (2018).

Due to gender inequalities in terms of roles, access and control of resources, decision-making, and access to information, it is common for women or the most disadvantaged groups to be more vulnerable to climate change impacts. However, there are other cases in which men can be differentially affected by climate change or that due to their roles they may need specific training that women might not particularly need. Below are some examples of links between gender and climate change:

Table 3. Examples of possible links between gender and climate change.

Links between gender and climate change		
 <p>Roles</p>	<p>Men and women have different roles in agriculture and the household.</p>	<p>In the face of drought, men can migrate for economic reasons, thus increasing the workload of women in the farm.</p> <p>With water scarcity, women might have to walk farther to collect water and thus they have less time to carry out their activities.</p>
 <p>Resources</p>	<p>Men and women have different access to income, land ownership, access to credit.</p>	<p>In the face of drought and crop failure, women cannot access loans or agricultural insurance to cope with crop losses.</p> <p>It can be easier for men to access loans or invest in alternative livelihoods.</p>

 <p>Access to information</p>	<p>Men and women have different access to information and to agricultural extension services.</p>	<p>As women spend more time at home, they might not have access to workshops or trainings on climate variability.</p> <p>Women face more cultural restrictions of mobility than men, access to less information, which will affect their ability to escape hazards.</p>
 <p>Decision-making</p>	<p>Men and women have different decision-making levels in the household.</p>	<p>Women might not have decision-making power to implement climate-smart agriculture practices.</p>

Gender mainstreaming in climate-smart agriculture should ensure that all program or project goals reflect upon and take into consideration the different needs, concerns, and skills of men and women, within a climate change context responsive to multiculturalism and age groups.

For each specific type of climate-smart intervention, the gender-related questions to assess will vary (for instance, the questions may be different for a project concerned with micro-loan access than for a water management project), as well as its scope (at the regional, national, departmental, municipal, community, or village level).

However, the main goal remains the same: to **ensure that actions take into account the needs and priorities of men and women and that they promote gender equality and women's empowerment.**

The following is a list of key questions according to different themes related to climate-smart agriculture. These questions and gender considerations should be raised repeatedly and in a holistic manner at the different stages of the program or project cycle.

The questions were designed with the purpose of helping developers of programs and projects on climate change in agriculture and rural development to mainstream a gender perspective, as well as extension workers or the staff in charge of monitoring and evaluation. These questions should be used only as a guide. Not all questions will be relevant to all planned actions.

Table 4. Key gender questions by the theme(s) of my intervention.

Key gender questions by the theme(s) of my intervention	
Water resources	<ul style="list-style-type: none"> • What is the current situation of water resources in the community (e.g., inventory of water sources) and who has access to such resources (men, women, boys, girls...)? • Are natural water sources being used? If so, how have natural water resources been used by men and women of different social strata (e.g., age, ethnicity, culture) and for what purposes? • Are there monitoring systems for the assessment of pollution of natural water sources? If so, what activities contribute the most to the pollution and by whom? • Are there protection measures for water resources in the community? If so, what is the contribution of men and women to the management and protection of water resources? • Do men and women in the community have access to water for agricultural activities during the dry season? • In case of drought or water rationing, is there a priority use of water in plots or in the household? If so, what agricultural or household activities are prioritized? Who (among men and women) has priority access to water resources and for what activities? Who decides that? • In case of general water use rationing after a dry spell, are the needs of men and women taken into consideration in the design of rationing plans? • Who is more vulnerable to droughts or floods? • Who benefits from the use and exploitation of water resources? Who decides upon such benefits? • Who is in charge of collecting water for households (in cases in which there is no access at home)? How much time is spent in this activity? • Who participates in development programs and on the improvement and use of water resources? Who benefits from them? • Who receives training on water management, rainwater harvesting, and improved irrigation systems? Do men and women actively participate in these training activities? • What activities performed by men and women need water? • How does the type of access to water by men and women influence their adaptive capacity and vulnerability to climate change? • Is there a community irrigation system? Who are the members of the Irrigation Board? Are women active participants in the decisions made by the Board? • What are the preferences and needs of men and women regarding improved irrigation systems and other water needs for agriculture and household chores? • Do men and women (of different age and ethnicity) have access to irrigation water optimization systems (e.g., drip irrigation)? • Are there crops irrigated at home? Who is usually in charge of such crops? • Are there trainings on improved water resource management? If so, who delivers the trainings? Who attends the trainings? What issues are covered and who will benefit the most from such trainings? • What systems are used to store water (for agricultural use and in the household)? Who is in charge of storing water in each case?
Agricultural practices for climate change adaptation and mitigation (CSA practices)	<ul style="list-style-type: none"> • What agricultural practices for climate change adaptation and mitigation (CSA practices) are being implemented by men and women in the field? (e.g., soil management and conservation, rainwater harvesting, etc.) • In cases where practices for climate change adaptation and mitigation have been adopted in the plot, what were the roles of men and women in the decision-making process at the moment of adopting each practice? • What are the implications (for men and women), in terms of workload, in the implementation of the new climate-smart agricultural practices? • Does the type of land ownership/tenure affect the decision to adopt climate-smart agriculture practices by men and women in the household? In what way?

Key questions according to the theme(s) of my intervention

Agricultural practices for climate change adaptation and mitigation (CSA practices)

- What information on different climate-smart agriculture practices is available for men and women?
- What are the preferences of men and women regarding climate change adaptation actions in the short, medium, and long term?
- Who has legal right over the plot or over the agricultural, livestock, forestry, or hydrobiological production resources?
- Who decides whether to rent or sell agricultural plots?
- Usually, who inherits land and other production assets?
- Who decides who will inherit land and other agricultural, livestock, forestry, or hydrobiological production resources?
- Who is in charge of working, maintaining or caring for the land and production resources?
- Who makes the decisions on how to use land and other agricultural (e.g., seeds, machinery), livestock (e.g., cattle), forestry (e.g., trees), or hydrobiological (e.g., fishpond systems) production resources?
- Who receives the benefits resulting from exploiting production assets (e.g., plot)?
- Who decides what to do with the benefits resulting from the exploitation, sale, or rent of production assets?
- Who owns the different animals present in plots (cows, goats, sheep, chicken, etc.) and who is in charge of their management?
- Who decides over the different animals present in plots and who decides upon the use of the economic benefits resulting from them?
- Are there programs or activities related to cattle genetic improvement in the region? If so, who has access to such programs?
- Are aquaculture and fishing activities carried out in the community? Who decides over them? Who is in charge of such activities? Who decides how to use the economic benefits resulting from the sale of the products of such activities?
- Does the community have plots or other natural resources managed in common? If so, who (men, women) decides how such community resources will be used?
- Are there conflicts over the use of community natural resources? If so, what is the role of men and women in the resolution of such conflicts?
- Do men and women in the community have access to local, regional, national, or international markets?
- Are there community groups (e.g., associations) engaged in climate change adaptation or mitigation processes or in the adoption of climate-smart practices? If so, do men and women have an active participation in such groups?
- Are there women-only groups of producers (e.g., women farmer associations)? If so, what are the approaches and topics of interest of such groups?
- How much influence do the women producer groups have over governance decisions on climate change mitigation and adaptation?
- During adaptation and mitigation activity planning (at the community, village, region, municipal, departmental, or national level), are the needs and limitations of men and women taken into consideration?
- Do policies and other regulatory instruments take into consideration the needs of women producers for the agricultural and forestry sectors?
- Are there rural women empowerment programs in the region?
- Are there programs to facilitate the equitable access to inputs and agricultural practices prioritizing the needs and limitations of rural men and women (of different ethnicity, age, and social status).

Natural resource management

- What kind of natural resources are present in the community or region? For each type of resource, how and for what activities do men and women use the resource?
- What kind of natural resources are perceived as more important for men and women in the community?

Key questions according to the theme(s) of my intervention

Natural resource management

- Is there gender equity in the access, use, and management of forests and trees, as well as the distribution of the corresponding benefits?
- Does the household consume forest products or medicinal plants? If so, who is in charge of collecting and preparing them?
- Are there trees or agroforestry systems in the plot? If so, who is in charge of their management?
- How are men and women engaged in the different segments of the timber and non-timber forest product value chains?
- What kind of risks and threats for the conservation of natural resources (e.g., hunting, logging) are perceived as more important by men and women?
- If there are risks and threats for the conservation of natural resources, how do men and women perceive this is affecting their daily life and activities?
- Are climate change and climate variability affecting the availability of natural resources in the community and regional biodiversity? What are the perceptions of men and women about it?
- Are men and women active participants in the decision-making process regarding community-based natural resources management?
- Does the community have natural resource conservation projects? If so, what criteria are used to define who can participate in the project (gender, ethnicity, and age considerations, among others)?
- Are there Payment for Environmental Services incentive programs in the community? If so, what family members appear in the contract for such payments?
- If there are Payment for Environmental Services programs (or other incentive programs for the conservation of natural resources) in the community, what family members decide how to use the benefits obtained through the program?

Food security and nutrition

- What is the role of men and women regarding food security and the nutritional status of the family?
- How has this affected or benefited the adoption of climate-smart agriculture practices and other adaptation and mitigation measures related to food security and the nutritional status of different members of the household?
- What are the needs of information on nutrition and food security of household members?
- Who in the household is usually in charge of choosing the menu, shopping, cooking, and other activities related to food preparation?
- What is the nutritional quality of traditional diets? Is there nutrition awareness among the different members of the family (men, women) at the time of purchasing food to help ensure food security?
- Do men and women have access to information on nutrition and food security?
- How many meals a day do different household members have (men and women, boys and girls, and the elderly)?
- Are food rations equal for all family members (men and women, boys and girls, and the elderly)?
- What is the level of malnutrition in boys and girls under age five?
- What percentage of population (disaggregated by ethnicity, age, and sex) shows signs of malnutrition / underweight or overweight (excess weight or obesity)?
- Are men and women active participants in trainings on nutrition and food security?
- Have climate events (e.g., droughts) affected the number of daily meals or the amount of food that rural men and women consume?
- What foods are the first to be removed from the diet (of men and women) in cases of food scarcity (e.g., as a result of a dry spell)?

Key questions according to the theme(s) of my intervention

Climate services

- Do men and women have access to weather forecasts, climate information, and technical assistance relevant to their agricultural decisions (i.e., when to sow)?
- If there is access to forecasts, climate information, and technical assistance, is it in a language that men and women can understand? Is the technical level understandable for men and women?
- Is there a governing body or other institutions responsible for providing regular climate information to male and female producers in the region?
- What are the information channels most commonly used by men and women to access climate information?
- Are there agricultural extension services in the region? Who is usually the beneficiary of these extension services?
- Are there sociocultural patterns that could limit the participation of women in meetings, exchanges, or trainings?
- Are women's needs and priorities included in agricultural extension and climate change programs?
- Do cooperatives or other groups have specific requirements to become a member (e.g., being head of household, own land) that could prevent women from being part of such associations?
- Are there cultural limitations for extension workers to be able to provide information to women (especially in sociocultural contexts where they might be forbidden to approach women without the consent of the husband)?
- Do household chores and taking care of children and the elderly restrict the access of women to information sources (i.e., are they able to attend trainings?) and limit the time women have available to listen to agricultural education programs and weather forecasts?
- Are there trainings or information sessions aimed at disseminating climate information and other aspects of climate-smart agriculture? If so, do women have an active participation in such trainings and information sessions?
- Do men and women have the same ability to interpret weather forecasts? Do people with lower literacy level or less schooling have access to this kind of information?
- What kind of climate information is more relevant and more demanded by male and female producers?

Climate risk and natural disaster management

- Have trainings been organized for men and women on prevention and reduction of climate risk and natural disasters?
- How can men and women be affected by climate risks or natural disasters?
- What member of the household or the community is more vulnerable to different types of climate risks or natural disasters?
- What are the perceptions of men and women regarding the different climate risks or natural disasters they have to or might face?
- What actions (in the short and medium-term) are followed by the different members of the household/community to cope with different climate risks or natural disasters?
- Who decides what climate risk or natural disaster adaptation or mitigation actions (in the short and medium-term) are followed in the household?
- What are the priorities of men and women that should be taken into account in case of climate risks or natural disasters?
- What resources are available for the different members of the household (men, women) to cope with climate risks or natural disasters?
- What are the implications for men and women (i.e., in terms of workload) of the different climate risk or natural disaster adaptation or mitigation actions (in the short and medium-term)?
- What kind of information is required for the different adaptation measures preferred by men or women or to cope with natural disasters (e.g., volcanic eruptions)?
- Who has access to information related to different climate risk or natural disaster adaptation measures?

Key questions according to the theme(s) of my intervention.

Climate risk and natural disaster management

- If some member of the household has access to information regarding different climate risk or natural disaster adaptation measures, is such information shared with the rest of the household/community members?
- In case of climate risk or natural disaster, what is the food security and nutritional situation of men and women?
- Have migrations been caused by natural disasters or resulted from climate change effects? If so, who has migrated?
- If there are migrations caused by natural disasters or resulted from climate change effects, have changes in gender roles and relations changed after the migratory processes?
- Are there gender-sensitive approaches in vulnerability assessments, climate risk management, and natural disaster management? Have they been adopted by local and national institutions?
- Is there agricultural insurance to reduce climate risks (e.g., insurance that covers harvest losses due to drought)? Who can access such insurance?

Financial resources

- Who has access to credit, weather insurance, or loans from formal financial services (men and women)?
- What average amount of credit is requested by rural men and women? What is the repayment period?
- Has credit been requested to cope with harvest losses resulting from changes in weather patterns or extreme climate events? If so, who has requested such credit and to whom have they been granted (men or women)?
- What kind of assets are needed as security or guarantee to get a loan? Who possesses this kind of assets (men, women)?
- What interest rate is applied to men and women (or groups of rural women) for the same loan/credit?
- What is the cancellation rate of loans requested (by men and women)?
- Are rural women's groups financially sustainable? If not, why? How many of them request formal loans?
- Are there informal micro-loans available for men and women (e.g., through savings and credit groups in the community)?
- Are there programs in the country or region to improve the access of women or other vulnerable sectors of society to financial services?
- Are there economic incentives from formal institutions to implement climate change mitigation practices? If so, who accesses such benefits? Who has access to credit, weather insurance, or loans from formal financial services (men and women)?

Module 1

How can I design and develop my intervention to ensure the mainstreaming of gender considerations?

Objectives

1. Ensuring that the specific roles, capacities, and needs of men and women of different age and ethnicity are taken into consideration in the design of the intervention.
2. Designing activities and planning specific financial assistance to reduce gender inequalities.

What I need to know

- It is a key factor that the gender gaps are defined from the outset and that the expected outcomes in gender dimensions are defined in order to ensure the holistic integration of the gender perspective within the framework of the climate-smart agriculture intervention to be developed.
- The design and development of an intervention with gender perspective will be more effective if staff have been sensitized on gender issues and have been trained in the use of tools to collect data disaggregated by sex.
- It is critical to plan and program budgets so that activities addressing gender dimensions can be carried out.



Remember

With the purpose of ensuring gender mainstreaming in climate-smart agriculture interventions, it is important to have personal commitment and a solid political and social will for the effective application of the measures presented in this module.

Step-by-step process to mainstream a gender approach in the design and development of climate-smart agriculture interventions

Module 1:

STEP 1

Selection of the intervention design team and training

- Identifying the team in charge of designing the intervention.
- Strengthening of gender capacities.

STEP 2

Analysis of relevant gender inequalities

- Analysis of the current situation and establishing the baseline.

STEP 3

Preparation and design of the intervention

- Identification of gender-specific gaps, objectives, and activities in the intervention.
- Gender mainstreaming.
- Gender indicators.
- Assessment of the consistency of the intervention.
- Stakeholder validation.
- Sustainability of actions.

STEP 4

Budget review

- Gender financial commitments.
- Involvement of actors.

The steps described below are valid for the design of programs at the regional, national, and sub-national level, as well as programs at a more local level.

Selection of the intervention design team and training.

Identifying the team in charge of designing the intervention	<ul style="list-style-type: none"> • Make sure the team designing the intervention includes gender focal points of the institutions involved, representatives of the Presidential Secretariat for Women, gender units of relevant ministries (e.g., MAGA), as well as representatives of civil organizations working for women's rights and gender equality. • Ensure a participatory design of the cross-cutting principles of the project, including the needs, demands, and perspectives of rural men and women with different sociocultural background and from different age groups.
Strengthening of gender capacities	<ul style="list-style-type: none"> • Train the staff from the institutions in charge of developing the program or project on gender and multiculturalism issues in agriculture, climate change, nutrition, and food security. • Where possible, try to have the training delivered by an expert in gender and multiculturalism.

Analysis of relevant gender inequalities

Analysis of the current situation and establishing the baseline	<ul style="list-style-type: none"> • Collect or assess (e.g., through interviews, focus groups, surveys, literature reviews, or databases) the roles and needs of men and women engaged in agricultural activities in the geographical area of interest, including multiculturalism concerns. • The baseline should include a qualitative and quantitative analysis. Analyze, for instance: <ol style="list-style-type: none"> 1. If there are social, cultural, or institutional inequalities that make it difficult for men and women to access knowledge, services, practices, or actions that help them prevent and cope with climate change impacts on an equitable basis. 2. What are the different roles, needs, rights, and priorities of men and women engaged in agriculture that affect their access and/or control over agricultural and financial resources or their level of engagement in decision-making. 3. If men and women are differentially affected by climate change or extreme climate events and to what extent the intervention being designed can effectively reduce or reinforce such inequalities. • Example questions (see also Table 4): <ul style="list-style-type: none"> - Division of labor: who does what? - Workload: how much time do men and women spend in productive activities and household chores? - Decision-making patterns: who makes decisions for productive activity and household chores? - Access and control over resources: who has access and who controls productive resources (e.g., land)? • Where possible, invite representatives (men and women) from beneficiary communities to take part in this analysis of the current situation to identify local perspectives and preferences.
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Preparation and design of the intervention

<p>Identification of gender-specific gaps, objectives, and activities in the intervention</p>	<ul style="list-style-type: none"> • With the results of the previous analysis (step 2) identify gender gaps (main inequalities) to be addressed with the intervention. • For each gap, define clear gender objectives and specific entry points to meet the purpose of the intervention. • For each objective, design activities or strategies (means to achieve gender objectives), analyzing the human resources, and financial resources needed (see also step 4). • Make sure that the gender objectives laid out are clear and concise, and that they are achievable taking into account the context and duration of the intervention. • Ensure consistency between the gap, the objective, and the activity being proposed. For instance: <ul style="list-style-type: none"> Gap: women are responsible for chicken production, but men are the ones to attend trainings on improved poultry production. Objective: ensuring that women have access to improved poultry production trainings. Activities: organize workshops targeting mainly women. Organize training and extension activities with timetables suitable for women to attend.
<p>Gender mainstreaming</p>	<ul style="list-style-type: none"> • In addition to these specific gender objectives, make sure the other objectives and outcomes of the intervention also meet the needs and priorities of men and women and that they are not contributing to exacerbate gender inequalities. Consider, for example: <ul style="list-style-type: none"> - Who will have access and control over project resources? Who will benefit the most from the intervention? - What limitations or opportunities does the intervention present for men and women? - What are the specific needs of men and women regarding the intervention? • Specify groups targeted by the intervention, including women and women's groups, and also use gender-inclusive language (e.g., "male and female producers", "men and women").
<p>Gender indicators</p>	<ul style="list-style-type: none"> • For each proposed activity, design a follow-up and monitoring plan by setting gender indicators (see examples of indicators by type of intervention in Module 3). If possible, engage rural men and women in the design of the list of indicators. • To the extent possible, align gender indicators with those which are already part of the national monitoring system (especially if the intervention is national in scope).

Assessment of the consistency of the intervention	<ul style="list-style-type: none"> • Assess the consistency or alignment of gender priorities proposed in the project with other existing policies. Consider, for example: <ul style="list-style-type: none"> - Are the gender activities proposed consistent with the general framework of the project in question? - Is the proposed intervention in line with other sectoral policies and programs associated? - Does it meet the objectives set in national development, poverty reduction, and climate change adaptation plans? - Does it meet, contribute to, and ensure the implementation of international agreements (e.g., COP decisions, Sustainable Development Goals, international human rights, women's rights treaties)?
Stakeholder validation	<ul style="list-style-type: none"> • Once the project draft is ready, invite social stakeholders to review the document. <ul style="list-style-type: none"> - This may be achieved with a participatory workshop or contacting each organization individually. - Here are some examples of social organizations to include: rural women's organizations, indigenous organizations, farmers' organizations, NGOs, international cooperation agencies, research institutes. • Mainstream recommendations by social stakeholders in the final version of the project document.
Sustainability of actions	<ul style="list-style-type: none"> • To the extent possible, use strategies that ensure activities and benefits of the interventions will be carried out on a continuous basis after their completion. For instance: <ul style="list-style-type: none"> - Securing local funding sources. - Ensuring the implemented activities respond to the interests of local men and women.

Budget review

Financial gender commitments	<ul style="list-style-type: none"> • Implement a gender perspective during the whole budgetary process in the design of the intervention, i.e., translate gender commitments included in the design of the intervention (step 3) into financial commitments. For instance: <ul style="list-style-type: none"> - Assess what sections of the budget are neutral or gender-sensitive. - Analyze public expenditure disaggregated by sex, age, and ethnicity. - Ensure the gender commitments contain budgeted activities. - Ensure there is funding for projects targeting women.
Involvement of actors	<ul style="list-style-type: none"> • Make sure all institutions involved in drafting the intervention participate in the gender budgeting process. • Make sure the process is carried out in close collaboration with institutions or departments with technical expertise (e.g., Ministry of Public Finance).



Checklist for the gender-based design stage

Issues to consider in the design stage	YES	NO
Regarding the selection of the intervention design team and training...		
• Is the staff in charge of designing the intervention knowledgeable about gender?		
• Is there participation of social stakeholders engaged in the process of designing the intervention?		
• Does the designing team of the intervention include representatives of civil organizations working on women's rights and gender equality?		
• Have mechanisms been devised for women and gender-equality organizations to be included in the design and planning of the intervention?		
Regarding the situational gender analysis...		
• Has an analysis or study been undertaken to identify existing gender inequalities, including those induced or exacerbated by climate change?		
• Does the gender analysis include aspects related to the division of labor, workload, decision-making, and access and control of productive resources by men and women?		
• Have the needs, priorities, and demands of men and women been included in the analysis?		
Regarding the preparation and design of the intervention...		
• Based on the situational gender analysis, are there some gender gaps to be addressed by the intervention?		
• For each gap, have the gender objectives and corresponding activities to be implemented been defined?		
• Is there consistency among the identified gender gap, the objectives, and the proposed activities?		
• Have women and women's groups been explicitly identified as project beneficiaries?		
• Do the proposed activities foster a critical review of gender stereotypes and traditional gender roles?		
• Have the potential barriers for the participation of men and women in the proposed activities been considered? What actions have been designed to overcome those barriers?		
• Do all project objectives and outcomes take into consideration the needs and priorities of men and women?		
• Are there gender indicators to prepare a follow-up plan for the impacts of the intervention?		
• Are the intervention and its gender considerations consistent with other sectoral policies, national development plans, and international agreements?		
• Has the project draft been validated with social stakeholders? Has their feedback been included in the final version of the document?		
Regarding budget review...		
• Is there funding to carry out the gender commitments included in the project?		
• Does the budget show explicitly the total amount that will directly benefit men and women?		
• Have the expenses for gender training and/or hiring of gender experts been included in the budget?		



List of resources for the gender-based design stage

Resource	Institution
STEP 1. Selection of the intervention design team and training	
Toolbox for gender training: https://www.wvi.org/sites/default/files/Gender_Training_Toolkit_Spanish.pdf	World Vision
<i>Así aprendimos a ser hombres</i> [This is how we learned to be men]. Guidelines for masculinity workshop facilitators in Central America: https://www.endvawnow.org/uploads/browser/files/This%20is%20How%20We%20Learned%20to%20be%20Men_Spanish.pdf	Oficina de Seguimiento y Asesoría en Proyectos (OSA) Costa Rica
STEP 2. Analysis of relevant gender inequalities	
Sourcebook on gender in agriculture http://www.fao.org/3/a-aj288e.pdf	FAO, IFAD, World Bank
STEP 3. Preparation and design of the intervention	
Guidelines for mainstreaming gender (Ibero-American General Secretariat): https://www.segib.org/wp-content/uploads/GUIA-TPG-ESP-WEB.pdf	Ibero-American General Secretariat
<i>Ruta de trabajo para la incorporación de consideraciones de género en el proceso nacional REDD+ de Guatemala</i> [Working Path to Mainstream Gender Considerations in Guatemala's National REDD+ Process]: http://www.marn.gob.gt/Multimedios/8719.pdf	CONAP, INAB, MAGA, MAEN Guatemala
<i>Marco normativo y de política pública para el avance de las mujeres</i> [Regulatory and Public Policy Framework for the Advancement of Women] (SEPREM): http://sepren.gob.gt/wp-content/uploads/Marco-normativo-y-de-pol%C3%ADtica-p%C3%ABblica-para-el-avance-de-las-mujeres-.pdf	SEPREM
STEP 4. Budget review	
<i>Manual del clasificador presupuestario con enfoque de género</i> [Gender Budget Classifier Manual] (SEPREM): http://sepren.gob.gt/wp-content/uploads/Manual_CPEG_-digital-1.pdf	SEPREM
Budgets with a gender perspective at federal and state levels in Mexico (UN Women): http://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2015/budgets%20with%20a%20gender%20perspective%20at%20federal%20and%20state%20levels%20in%20mexico.pdf?la=es&vs=4546	UN Women

Module 2

How can I ensure that the implementation stage mainstreams gender considerations?

Objective

Implementing the activities planned in the climate-smart agriculture intervention while ensuring that both men and women from different age groups, social status, and ethnicity have equal access to the resources and services provided, and that they benefit equally from the training and education activities held.

What I need to know

- Raising awareness among extension workers or field agents on the importance of gender concerns will facilitate appropriate consideration of such issues during the implementation of activities.
- Setting a baseline of gender and climate vulnerabilities affecting agricultural activities of men and women at the local level will allow measuring the progress of activities in each community during implementation.



Remember

Including the needs and preferences of rural women during the decision-making process of the intervention will ensure that activities focus on women's priorities and thus potentially lead to increased interest and engagement from beneficiary communities.

Step-by-step process to mainstream a gender approach in the implementation of climate-smart agriculture interventions

Module 2:

STEP 1

Selection of the implementation team

- Selection of the implementation team.
- Training.

STEP 2

Establishing the baseline

- Gender analysis at the local level (prior to the intervention).

STEP 3

Implementation with a gender perspective

- Implementation with a gender perspective.
- Inclusion of women.

The steps described below are valid for the implementation of programs at the regional, national, and sub-national level, as well as programs at a more local level.

Selection of the implementation team

<p>Selection of the implementation team</p>	<ul style="list-style-type: none"> • Make sure the implementation team (e.g., field agents) is knowledgeable about gender. If possible, include criteria for knowledge about gender in the terms of reference used to hire the implementation team. • Ensure a balance between the number of men and women in the team, pursuing a proportion of 50% men and 50% women.
<p>Training</p>	<ul style="list-style-type: none"> • Assess possible knowledge gaps among team members – including representatives of partner institutions – on the needs, challenges and/or opportunities of men, women and/or different ethnic backgrounds regarding the differential impacts of climate on their agricultural activities and livelihoods. Make sure they are knowledgeable about, for instance: <ul style="list-style-type: none"> - Gender equity and equality issues. - Gender challenges, opportunities, and vulnerabilities to climate change. - Adaptation needs differentiated by gender. - Information needs disaggregated by gender on agricultural practices for climate change mitigation and adaptation. - Traditional decision-making patterns in the household and in agricultural plots. Changes in these patterns in years of drought or natural disasters. • If necessary, strengthen the knowledge of team members by means of awareness-raising workshops by an expert on gender and climate change, or provide the team with key documents and tools.

Establishing the baseline

<p>Gender analysis at the local level (prior to the intervention)</p>	<ul style="list-style-type: none"> • On the basis of the objectives set in the design stage (see Module 1), collect the data disaggregated by sex required to establish the baseline in the beneficiary communities. • The data necessary to establish the baseline will vary according to the type of intervention (see Table 4). • This analysis at the local level is necessary, because gender relations and climate change vulnerability are unique for each geographical and social context. • The baseline is crucial to be able to measure the progress of activities in each community during implementation.
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Implementation with a gender perspective

Implementation with a gender perspective	<ul style="list-style-type: none"> • Make sure that during the implementation of activities men and women: <ul style="list-style-type: none"> - Have an equal participation in implemented activities. If necessary, set a minimum percentage of women's participation (e.g., 50%). - Benefit equally and have equal access to the resources and services provided. For instance, make sure that both men and women receive agricultural inputs or trainings. - Are actively engaged in decision-making processes for the implemented activities. If necessary, ask women for their opinion in meetings.
Inclusion of women	<ul style="list-style-type: none"> • During the establishment of the baseline and the implementation of activities take into account the different demands and perspectives of rural women and local women's organizations.



Checklist for the gender-based implementation stage

Issues to consider in the implementation stage	YES	NO
Regarding the selection of the implementation team...		
<ul style="list-style-type: none"> • Is the implementation team competent on gender issues in agriculture, food security, nutrition, and climate change? 		
<ul style="list-style-type: none"> • Have the team members received training on gender issues and their link to agriculture, climate change, and food security? 		
<ul style="list-style-type: none"> • Does the implementation team have a balanced number of male and female members? 		
Regarding the establishment of the baseline...		
<ul style="list-style-type: none"> • Has a study been conducted in beneficiary communities to establish a baseline disaggregated by sex? 		
<ul style="list-style-type: none"> • Is there sound knowledge of the gender inequalities and the socioeconomic and climatic conditions in intervention regions? 		
Regarding the implementation activities...		
<ul style="list-style-type: none"> • Do men and women have an active and equal participation in implemented activities? 		
<ul style="list-style-type: none"> • Does the intervention benefit men and women? Do men and women have equal access to the resources and services provided? 		
<ul style="list-style-type: none"> • Do women have decision power on how to use the benefits provided by the project? 		
<ul style="list-style-type: none"> • Do women have active participation in the decision-making processes related to the activities to implement? 		
<ul style="list-style-type: none"> • Do the implemented activities take into consideration the demands and perspectives of rural women? 		
<ul style="list-style-type: none"> • Have stakeholders from local institutions (e.g., women's organizations) been engaged in the implemented activities? 		

List of resources for the gender-based implementation stage

Resource	Institution
STEP 1. Selection of the implementation team	
Gender and climate change research in agriculture and food security for rural development (FAO, CCAFS): http://www.fao.org/3/i3385e/i3385e.pdf	FAO, CCAFS
Resource guide on gender and climate change: https://www.undp.org/content/dam/aplaws/publication/en/publications/environment-energy/www-ee-library/climate-change/resource-guide-on-gender-and-climate-change/Resource_Guide_Gender_CC.pdf	UNDP
STEP 2. Establishing the baseline	
Example of survey to collect sex-disaggregated data on agricultural activities, decision-making, climate information, perception of risk, and values: https://dataverse.harvard.edu/file.xhtml?persistentId=doi:10.7910/DVN/28324/SZEMSQ&version=5.1	CCAFS
Questionnaire for collecting sex-disaggregated water data: https://unesdoc.unesco.org/ark:/48223/pf0000234514	UNESCO
Baseline survey on gender at the community level: https://cgspace.cgiar.org/bitstream/handle/10568/80198/VBS%20Site%20report%20EI%20Tuma%20Nicaragua.pdf?sequence=1&isAllowed=y	CCAFS
Diagnosis of gender wquality in the rural area https://www.mapa.gob.es/es/desarrollo-rural/temas/igualdad_genero_y_des_sostenible/DIAGN%C3%93STICO%20COMPLETO%20BAJA_tcm30-101391.pdf	Ministry of the Environment and Rural and Marine Affairs (Spain)
STEP 3. Implementation with a gender perspective	
How to integrate gender issues in climate-smart agriculture projects: http://www.fao.org/3/a-i6097e.pdf	FAO and World Bank
Case studies on gender and climate change in Latin America: https://cdkn.org/wp-content/uploads/2017/07/Arana_G%C3%A9nero-y-cambio-clim%C3%A1tico-en-Am%C3%A9rica-Latina-ULTIMOS-CAMBIOS_05-de-JULIO-1.pdf	CDKN
Facilitation guide for women entrepreneurs with a gender perspective: https://www.sica.int/download/?86719	Ministry of Economy of El Salvador, Government of El Salvador
A Toolbox for the empowerment of rural women entrepreneurs: http://www2.unwomen.org/-/media/field%20office%20mexico/documentos/publicaciones/2018/04/caja%20de%20herramientas%20f.pdf?la=es&vs=5604	UN Women

Module 3

How can I design a gender-responsive monitoring and evaluation system?

Objective

Having the monitoring and evaluation activities of my intervention collect data disaggregated by sex, age, and ethnicity, to ensure the follow-up of achievements made in terms of closing the gender inequality gaps.

What I need to know

Establishing concisely defined, realistic (achievable) gender goals is critical to the efficiency of monitoring and evaluation processes.

Designing gender indicators in the target area or intervention sector may be a key input to guide the design and development of actions seeking to reduce these inequalities and to design the plan to follow up, monitor, and evaluate their impact.

Sharing the achievements made by the project to close gender inequality gaps in agriculture within a climate change context is crucial for future actions to learn from previous experiences.



Remember

Establishing a sound monitoring and evaluation system will ensure enhanced transparency and accountability of actions designed to address gender inequalities. The design of the monitoring and evaluation system should also take into account existing systems, either at national, organizational, or project level and, if possible, it should adapt them to reflect gender gaps and achievements.

Step-by-step process to mainstream a gender approach in the monitoring and evaluation of climate-smart agriculture interventions

STEP 1

Indicators and Means of Verification

- Design of indicators.
- Establishment of means of verification.

STEP 2

Selection and training of staff members in charge of designing the monitoring and evaluation plan

- Selection of staff.
- Training.

STEP 3

Implementation of monitoring and evaluation of progress and achievements

- Monitoring and evaluation of achievements.
- Monitoring and evaluation reports.

The steps described below are valid for the monitoring and evaluation of programs at the regional, national, and sub-national level, as well as programs at a more local level.

Indicators and Means of Verification

Design of indicators	<ul style="list-style-type: none"> • Remember that usually indicators are set at the design stage of the intervention. It is important to make an inventory of gender and climate change indicators already being collected by other projects of the same program, or through the national monitoring system and, if possible, also include them in your intervention. • For each activity proposed in the intervention, design a follow-up plan by developing indicators that could measure the progress in terms of the gender and climate change adaptation objectives of the intervention (see the list of indicator examples at the end of this module). • Design indicators that are: <ul style="list-style-type: none"> - Clearly and concisely defined and that can be measured accurately and objectively over a specified timeframe and a specified place. - Realistic and achievable, taking into account the context and duration of the intervention. - Both quantitative and qualitative (based on the experience, attitudes, opinions, and feelings of men and women), and always disaggregated by sex. • Include different types of indicators: <ul style="list-style-type: none"> - Structure: for instance, number of gender-sensitive climate change policies/projects at the department level or degree of national preparedness and responsiveness to natural disasters. - Processes: for instance, number of men and women who received training on the implementation of practices to reduce the negative impacts of climate or number of men and women who are implementing the water harvesting practice. - Outcome: for instance, number of men and women who implemented the water harvesting practice and reported being less affected by droughts.
Establishment of means of verification	<ul style="list-style-type: none"> • In the list of selected indicators, specify the corresponding means of verification. That is, indicate what information sources or instruments will be used to show that the outcomes described have been obtained (methodology to obtain data and evidence). <ul style="list-style-type: none"> - Examples of means of verification: results of surveys, statistics, minutes, reports, interviews, observations, etc. • Make sure the means of verification are truthful and reliable (e.g., if they are not collected by the project, use official data from the government, data from the United Nations, or data from research institutes). <ul style="list-style-type: none"> - It is important to establish the reliability of the information source, especially in cases in which data are not being directly collected by the program or project.

Selection and training of staff members in charge of designing the monitoring and evaluation plan

Selection of staff	<ul style="list-style-type: none"> • If possible, include criteria for knowledge about gender in the terms of reference used to hire the monitoring and evaluation team. • Ensure a balance between the number of men and women in the team in charge of the monitoring and evaluation tasks, pursuing a proportion of 50% men and 50% women.
Training	<ul style="list-style-type: none"> • Train the staff in charge of the monitoring and evaluation tasks on the specific gender objectives and goals set in the intervention. • Inform the monitoring and evaluation staff about the importance of collecting sex-disaggregated data, not at household level.

Implementation of monitoring and evaluation of progress and achievements

Monitoring and evaluation of achievements	<ul style="list-style-type: none"> • Monitor the advance of gender goals and objectives established by the intervention (for instance, in terms of access, benefits, and participation of men and women by ethnicity and age group). • Report on a regular basis how and in what way are gender issues being considered in the activities. Make sure feedback is provided to project or program staff. • During field visits: <ul style="list-style-type: none"> - When possible, collect monitoring and evaluation data disaggregated by sex, age, and ethnicity. - Make sure attention is paid to gender and multiculturalism issues in agriculture, food security, and climate change. - In surveys or interviews, it is recommended that women in the monitoring team interview women beneficiaries of the intervention. - Take time to meet with beneficiaries of the intervention (men and women of different age groups, ethnicity, and social profiles). • Explicitly discuss with field agents of the program about the achievements related to gender, food security, nutrition, and climate change adaptation. • If during the monitoring process underperformance in the implementation of gender considerations is detected, introduce corrective actions. Co-design such corrective actions through consultations with gender experts and local stakeholders.
Monitoring and evaluation reports	<ul style="list-style-type: none"> • Make sure monitoring and evaluation reports inform on the progress, outcomes, and impacts in terms of gender in agriculture, food security, nutrition, and climate change. • Identify, document, and disseminate the achievements, lessons learned, and good practices obtained by the project, which promote gender equality and women empowerment.

Checklist for the gender-based monitoring and evaluation stage

Issues to consider in the monitoring and evaluation stage	YES	NO
Regarding indicators and means of verification...		
<ul style="list-style-type: none"> • Have indicators (disaggregated by sex, age, and ethnicity) been mainstreamed to measure the progress in women's empowerment and gender equality? 		
<ul style="list-style-type: none"> • Are gender indicators clearly and concisely defined and are they achievable, according to the context and timeframe of the intervention? 		
<ul style="list-style-type: none"> • Are the verification sources used to measure the progress of each gender indicator reliable? 		
Regarding the selection and training of staff members in charge of designing the monitoring and evaluation plan...		
<ul style="list-style-type: none"> • Was gender knowledge included in the criteria to select the monitoring and evaluation staff? 		
<ul style="list-style-type: none"> • Has training on the collection of sex-disaggregated data been provided to monitoring and evaluation staff explicitly communicating the gender objectives of the intervention? 		
Regarding the implementation of monitoring progress and achievements...		
<ul style="list-style-type: none"> • Has attention been paid to gender issues in climate change, food security, nutrition, and agriculture in the protocols used in the monitoring and evaluation processes? 		
<ul style="list-style-type: none"> • During the implementation of the monitoring and evaluation processes, have meetings been scheduled with project beneficiaries (men and women of different ethnicity and social strata)? 		
<ul style="list-style-type: none"> • If underperformance in the implementation of gender considerations is detected during monitoring processes, have corrective actions been introduced to improve the performance in subsequent project stages? 		
<ul style="list-style-type: none"> • Do monitoring and evaluation reports inform on the progress, outcomes, and impacts in terms of gender in agriculture, food security, nutrition, and climate change? 		

List of resources for the gender-based monitoring and evaluation stage

Resource	Institution
STEP 1. Indicators and means of verification	
Building women's empowerment indicators: https://cgspace.cgiar.org/handle/10568/80210	CIAT
Women's Empowerment in Agriculture Index: https://www.slideshare.net/IFPRI-WEAI/weai-presentation-spanish-march-2013final	IFPRI
Gender indicators: conceptual and methodological guidelines for their development and use: https://www.asocam.org/sites/default/files/publicaciones/files/a8a2ddc56e3b6f449c8223939cf9f237.pdf	IFAD
Gender indicators for public management in the agricultural and forestry sector: http://www.fao.org/tempref/docrep/fao/field/009/ai083s/ai083s00.pdf	FAO
STEP 2. Selection and training of staff members in charge of designing the monitoring and evaluation plan	
Standards for collecting sex-disaggregated data for gender analysis in agriculture: https://cgspace.cgiar.org/bitstream/handle/10947/3072/Standards-for-Collecting-Sex-Disaggregated-Data-for-Gender-Analysis.pdf?sequence=1&isAllowed=y	CGIAR
STEP 3. Implementation of monitoring and evaluation of progress and achievements	
Gender issues in monitoring and evaluation in agriculture: http://documents.worldbank.org/curated/en/463521468183861258/pdf/NonAsciiFileName0.pdf	World Bank
Guidelines on collecting sex-disaggregated water data: https://unesdoc.unesco.org/ark:/48223/pf0000234513	UNESCO
Integrating a gender dimension into monitoring and evaluation of rural development projects: https://www.ndi.org/sites/default/files/Handout%20%20-%20Integrating%20a%20Gender%20Dimension%20into%20Monitoring%20and%20Evaluation.pdf	World Bank

Indicators

Examples of indicators to take into consideration if I want to design a gender-based monitoring and evaluation system.

This section includes a list of examples of indicators that could be used to ensure gender mainstreaming in monitoring and evaluation systems, according to the theme(s) of the actions planned in the intervention.

These indicators should be used only as a guide. Not all indicators will be relevant to all planned actions. In this sense, it is important to remember that indicators should always be adapted to the local context, taking into consideration the socioeconomic, cultural, and climate features of the region.

Examples of gender indicators according to the theme(s) of my intervention

Water resources

Structure indicators:

- Existence of gender specific objectives and considerations in guiding and monitoring and evaluation documents of water management programs and projects.
- Existence of gender units or gender focal points in ministries and institutions of relevance to water resources management.
- Percentage of women in decision-making positions in public water-related institutions.
- Perception about the participation of women in decision-making processes in public water-related institutions.

Process indicators:

- Time men, women, boys, and girls spend collecting, supplying, and managing water (hours/week).
- Perception of men and women regarding the availability and quality of water (by activity: irrigation, personal hygiene, cooking, etc.)
- Number of plots under irrigation managed by women / Total number of plots (in the household/community/ region/country).
- Total area of plots under irrigation managed by women / Total area under irrigation (in the household/community/ region/country).
- Average size of plots under irrigation managed by women / Average size of plots under irrigation managed by men.
- Perception of men and women regarding decision-making processes and conflict resolution on the use and prioritization of water in the household and in agriculture.
- Type of water source used for irrigation by men and women (rainwater, well, underground water, reservoir, etc.)
- Distance between agricultural plots managed by men and women and the water source.
- Percentage of women beneficiaries in training/educational events/activities related to irrigation and improved water resource management.
- Existence and number of gender-sensitive trainings (held by water governance organizations or by the program/project) and number of men and women attending such trainings.

Examples of gender indicators according to the theme(s) of my intervention.

Water resources

**Outcome indicators:**

- Percentage of plots managed by men and women with an improved irrigation system after the intervention.
- Level of satisfaction reported by men and women regarding the training/educational events/activities related to irrigation and improved water resource management.
- Percentage of men and women reporting improvement of their production systems one year after the adoption and implementation of improved climate-smart water management practices.
- Percentage of men and women who continue to use the improved water management practices one year (or other timeframe) after the intervention.
- Perception of economic benefit increase or reduction reported by women from their improved water resource management systems.
- Percentage of change in the efficiency of water use by men and women.

Agricultural practices for climate change adaptation and mitigation (CSA practices)
Structure indicators:

- Number of policies at the national and regional level promoting gender-sensitive climate-smart agriculture practices
- The institutional roles are clearly defined in the design and implementation of gender-sensitive climate-smart interventions.
- The proposed climate-smart agriculture programs are consistent with the priorities of local male and female producers and with national agricultural development.
- Existence of gender units or gender focal points in ministries and institutions of relevance for the sustainable management of climate-smart agricultural, livestock, and fishing resources.
- Number of trainings for extension workers or for the staff of different relevant institutions that have mainstreamed a gender perspective (relative to the total number of trainings).

Process indicators:

- Number of plots managed by women / Total number of plots (in the household/community/country).
- Number of livestock owned by men and women.
- Number of men and women with an active participation in groups of producers (fishermen, ranchers, or farmers).
- Percentage of men and women with access to local, regional, national, or international markets.
- Perception regarding the participation (of men and women) in decision-making processes regarding the adoption of climate-smart agriculture practices or technologies.
- Number of male and female producers who have implemented climate-smart agriculture practices or technologies with the assistance of the project.
- Perception of rural men and women about the influence of land-rights in their climate change adaptive capacity and vulnerability.
- Increase or reduction of workload reported (in hours/week) resulting from the implementation of each adopted climate-smart agriculture practice or technology (women/men).
- Percentage of time used in unpaid household chores and agricultural activities (men/women).
- Number of men and women trained in climate change adaptation and mitigation and in new climate-smart agriculture practices.
- Percentage of participation of men and women in trainings on climate-smart agriculture practices or technologies.

Examples of gender indicators according to the theme(s) of my intervention.

Agricultural practices for climate change adaptation and mitigation (CSA practices)

Outcome indicators:

- Number of men, women, boys, and girls less vulnerable to the effects of climate change.
- Percentage of male and female beneficiaries of the project with alternative, sustainable, and climate-resilient livelihoods.
- Number of male and female producers who have implemented climate-smart agriculture practices with the assistance of the project.
- Perception regarding the increase of economic benefits (average income reported) as a result of the adoption of new climate-smart agriculture practices or technologies (women/men).
- Number of men and women with a larger productive, agricultural and livestock asset base as a result of the adoption of new climate-smart agriculture practices or technologies (women/men).
- Increase in the number of hectares of land managed by men and women, in which climate-smart agriculture practices are carried out.
- Number of men and women reporting less crop or livestock losses during a lean/low season as a result of the implementation of climate-smart agriculture technologies or practices.

Natural resource management

Structure indicators:

- Number of natural resource conservation programs with a gender perspective at the national and sub-national level.
- Existence of (national or international) funding for Payment for Environmental Services programs with provisions to ensure equal number of men and women benefiting from them.
- Existence of gender units and gender focal points in ministries and institutions of relevance to the sustainable management of natural resources and climate-smart villages.

Process indicators:

- Perception about the importance of different natural resources in the community (women/men).
- Time spent (hours/month) in the collection and preparation of wood products and medicinal plants (women/men).
- Total monthly income from the management of timber and non-timber resources (women/men).
- Percentage of men and women with access to timber and non-timber forest resources.
- Number of trees in the farm managed by men and by women.
- Perception of current risks or hazards for the conservation of natural resources (women/men).
- Perception about climate change effects and climate variability regarding the availability of natural resources in the community (women/men).
- Percentage of participation in decision-making processes related to community-based natural resource management (women/men).
- Number of men and women participating in natural resource conservation projects in the community.
- Number of men and women beneficiaries of the Payment for Environmental Services incentive program.

Outcome indicators:

- Increase in the total monthly income from the management of timber and non-timber forest resources (women and men).
- Increase in the number of women receiving Payments for Environmental Services.
- Increase in the number of men and women participating in natural resource conservation projects.
- Kilograms of firewood saved due to the adoption of improved stoves (men and women).
- Number of men and women reporting improved economic benefits from the sustainable management of natural resources or the conservation of biodiversity, as a result of the assistance of the program or project.
- Perception of men and women about the conservation or improvement of ecosystem services and natural resources under conditions of climate change and climate variability.

Examples of gender indicators according to the theme(s) of my intervention.

Food security and nutrition**Structure indicators:**

- Number of (national and sub-national) policies, standards, and programs concerned with food security and nutrition with a gender and multicultural perspective.
- Number of extension workers from “*Casa-Hogar Saludable*” [community health extension agents] providing food security and nutrition education to men and women (community/region/country).
- Existence of gender units and gender focal points in ministries and institutions of relevance to food security and nutrition.

Process indicators:

- Nutritional status of all household members (men and women, boys and girls, and the elderly).
- Average number of meals consumed within the last seven days (by all household members: men, women, boys, girls, and the elderly).
- Number of average calories consumed within the last seven days (by all household members: men, women, boys, girls, and the elderly).
- Amount of animal products (fish, meat, milk, eggs) consumed by each household member within the last seven days.
- Proportion of fruits, vegetables, animal products, and grains in the diet of different household members (men, women, boys, girls, and the elderly).
- Number of men and women who have been trained on themes related to food security and nutrition.
- Rate of active participation of men and women in local food, nutrition, and agriculture committees.
- Average number of hours that men and women spend cooking and preparing food.
- Proportion of expenditure in food over the total amount of household expenditure (or by men and women, in case incomes are administered separately).
- Prevalence of stunted or underweight boys and girls under age five.
- Prevalence of men and women (adults and the elderly) with malnutrition symptoms or overweight (mildly, moderately, or obese).
- Prevalence of anemia due to iron deficiency in women of reproductive age and in boys and girls under age five.

Outcome indicators:

- Percentage of improvement in the nutritional status of all household members (men and women, boys and girls, and the elderly).
- Percentage of men and women in the area of intervention who report an increase in the availability of and access to food.
- Percentage reduction in the prevalence of stunted or underweight boys and girls under age five.
- Change in the proportion of fruits, vegetables, animal products, and grains in the diet of different household members (men and women, boys and girls, and the elderly).
- Number of men and women who report an improvement in their household's food security in lean season.
- Number of men and women who report a reduction in the dependence on food products acquired externally (from outside the farm), compared to before the intervention/project.

Climate services**Structure indicators:**

- Number of documents and climate information materials (e.g., informational brochure) with a gender and multicultural perspective.
- Number of national programs aimed at improving the distribution of multicultural and gender-aware climate information to the rural population.

Examples of gender indicators according to the theme(s) of my intervention.

<p>Climate services</p>	<p>Process indicators:</p> <ul style="list-style-type: none"> • Number of men and women with access to regular climate information. • Preferences of men and women regarding information channels to access agricultural extension and climate information. • Priorities of men and women regarding the type of climate information service products preferred. • Number of men and women visited by extension services in a given timeframe. • Perception of men and women regarding the suitability of the contents of climate and extension services to their needs and priorities. • Number of men and women in agricultural cooperatives that share climate information. • Participation rate of men and women in agricultural cooperatives that share climate information. • Percentage of men and women participating in trainings and workshops where climate information is shared. • Percentage of men and women with access to climate information through ICTs, radio and television shows. • Time men and women report they spend to obtain climate information through television, radio, newspaper, or other media. <p>Outcome indicators:</p> <ul style="list-style-type: none"> • Perception regarding the improvement of the participation rate in decision-making processes of men and women to use climate information in the management of plots and agricultural activities after project implementation. • Increase or reduction in the percentage of men and women with access to climate information through ICTs, radio and television shows after project implementation.
<p>Climate risk and natural disaster management</p>	<p>Structure indicators:</p> <ul style="list-style-type: none"> • Number of national climate risk and natural disaster management plans and policies with specific gender and multicultural considerations. • Number of gender and multiculturalism specialists involved in climate risk and natural disaster management programs. • Degree of national preparedness and response capacity to ensure the basic foundations of equity in the face of extreme climate events or natural disasters. <p>Process indicators:</p> <ul style="list-style-type: none"> • Percentage of men and women with access to agricultural insurance. • Percentage of men and women who know how to swim. • Percentage of men and women trained in prevention of risks, hazards, and action protocols in the face of natural disasters. • Percentage of economic assistance received by men and women affected by the natural disaster (on the basis of the different types of assistance). <p>Outcome indicators:</p> <ul style="list-style-type: none"> • Reduction of the percentage of men and women dead, severely and mildly injured after a natural disaster (of similar seriousness to a previous disaster). • Percentage of decrease in the daily work of men and women in food, water, and fuel supply for the household after the natural disaster. • Reduction of the percentage of men and women who migrated after a natural disaster or for reasons related to climate change. • Changes in income or livelihoods between men and women displaced and/or resettled by the program after the natural disaster. • Perception of increase or reduction of the degree of preparedness and reaction of men and women in the face of natural disasters after trainings held by the project. • Number of men and women who claim to have increased capacity to address the risks after completion of the project. • Number of men and women with reduced risk to extreme climate events.

Examples of gender indicators according to the theme(s) of my intervention.

Financial resources

Structure indicators:

- Number of national policies that establish the need to improve the access of rural women to formal loans.
- Number of (national or sub-national) programs in the implementation stage to improve the access of rural women to formal loans.
- Number of financial or government institutions that provide services to men and women in rural communities.

Process indicators:

- Number of men and women who have accessed formal loans for agricultural, livestock, or fish farming production during last year.
- Number of men and women who have accessed informal loans (e.g., from relatives) for agricultural, livestock, or fish farming production during last year.
- Percentage of approved loans for men and women over the total number of requested loans.
- Amount of formal loans obtained and type of interest rate applied (for men and women, on the basis of ethnic and age differences).
- Number of rural women who accessed programs to improve their access to formal loans in (national or sub-national) programs.
- Number of men and women who receive financial advice.

Outcome indicators:

- A reduction in the differences between men and women regarding access to financial services after project implementation.
- Proportion of men and women who report having access and resorting formal loans for their activities.
- Proportion of men and women who report having access and resorting to agricultural insurance after an extreme climate event (e.g., extreme drought).
- Perception of the increase or reduction in the decision-making power of women in agricultural and household activities after accessing formal loans.
- Number of men and women beneficiaries who are considered financially safer now than before the intervention/project.

References

- Aguilar, L. (2010). Establishing the Linkages between Gender and Climate Change Adaptation and Mitigation. In I. Dankelman (Ed.), *Gender and Climate Change: An Introduction* (pp. 174–193). London: Routledge.
- Bonilla-Findji, Osana; Eitzinger, Anton; Andrieu, Nadine; Howland, Fanny C.; Bejarano, Gustavo A.; Suchini, Jose Gabriel y Arora, Diksha (2018). *Socialización resultados Monitoreo 2018. Olopa-Territorios Sostenibles Adaptados al Clima*. Programa de investigación del CGIAR Cambio Climático, Agricultura y Seguridad Alimentaria (CCAFS).
- CCAFS (2019). *Glosario de prácticas de Agricultura Sostenible Adaptada al Clima (ASAC) en los Territorios Sostenibles Adaptados al Clima (TeSAC) de Latinoamérica*. Programa de investigación del CGIAR Cambio Climático, Agricultura y Seguridad Alimentaria (CCAFS).
- Giraldo-Mendez, Diana, Martínez-Barón, Deissy, Loboguerrero, Ana María, Martínez, Jesús David, & Ramírez-Villegas, Julián. (2018). *Mesas Técnicas Agroclimáticas (MTA): Manual de Implementación*. Programa de investigación del CGIAR Cambio Climático, Agricultura y Seguridad Alimentaria (CCAFS).
- Habtezion, S. (2013). *Overview of linkages between gender and climate change. Asia and the Pacific UNDP and Global Gender and Climate Alliance*
- Instituto Nacional de Estadística de Guatemala (INE) (2014). *Caracterización República de Guatemala*. Gobierno de Guatemala.
- Kreft, S., Eckstein, D., & Melchior, I. (2016). *Global Climate Risk Index 2017 Who Suffers Most From Extreme Weather Events? Weather-related Loss Events in 2015 and 1996 to 2015*. Germanwatch.
- Loboguerrero, A. M., Boshell, F., León, G., Martinez-Baron, D., Giraldo, D., Recaman Mejía, L., Díaz, E. and Cock, J. (2018). Bridging the gap between climate science and farmers in Colombia. *Climate Risk Management*, 22, 67–81. <https://doi.org/10.1016/j.crm.2018.08.001>
- Magrin, G. O., Marengo, J. A., Boulanger, J.-P., Buckeridge, M. S., Castellanos, E., Poveda, G.,... Vicuña, S. (2014). Central and South America. In V. R. Barros, C. B. Field, D. J. Dokken, M.D. Mastrandrea, K. J. Mach, T. E. Bilir, ... L. L. White (Eds.), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (pp. 1499–1566). Cambridge, United Kingdom and New York, NY, USA,: Cambridge University Press.
- Ministerio de Agricultura y Ganadería (MAGA) y FAO (2016). *Guía técnica del extensionista rural*.
- Smith, P., Bustamante, M., Ahammad, H., Clark, H., Dong, H., Elsiddig, E. A., ... Tubiello, F. N. (2014). Agriculture, Forestry and Other Land Use. In *Climate Change 2014 Mitigation of Climate Change: Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*.

Annexes



Legislative framework on gender equality in Guatemala

The Government of the Republic of Guatemala has established a sound legislative framework to ensure men and women have and are able to access the same rights and opportunities in the country.

Concerning international treaties on human and women's rights, the State has signed and ratified most of them, including the Universal Declaration of Human Rights (1948); the Convention on the Political Rights of Women (1952); the International Covenant on Economic, Social and Cultural Rights (1966); the Convention on the Elimination of All Forms of Discrimination against Women (1979); the Convention on the Rights of the Child (1989); the International Conference on Population and Development, adopted at Cairo, Egypt (1994); the Fourth World Conference on Women in Beijing and Platform for Action (1995); and the Sustainable Development Goals (2015).

The following regional policy instruments are also noteworthy: the American Declaration on the Rights and Duties of Man (1948); the American Convention on Human Rights (1969); the Inter-American Convention on the Prevention, Punishment and Eradication of Violence Against Women (1994); the Inter-American Democratic Charter (2001); and the Montevideo Consensus on Population and Development (2013). Regarding the Central American Integration System (SICA), the policy instruments addressing comprehensively women's human rights include the Health Agenda for Central America and the Dominican Republic (2009-2018); the Regional Policy on Gender Equality and Equity of the Central American Integration System (2013); the Strategic Plan for Gender Mainstreaming in the Health Sector (2014-2018) within the framework of the Health Plan for Central America and the Dominican Republic (2013).

The Political Constitution of the Republic of Guatemala guarantees the rights of men and women as shown by Article 4: *“In Guatemala, all human beings are born free and equal in dignity and rights. Men and women, irrespective of their marital status, have equal opportunities and responsibilities”*. In addition, the Republic of Guatemala has a wide range of national instruments to advance equality between men and women and the rights of rural women, including the National Policy for the Advancement and Integral Development of Women and Plan for Equity of Opportunities (2008-2023); the Public Policy for Coexistence and the Elimination of Racism and Racial Discrimination (2006); the National Policy on Integral Rural Development (2009); and the Institutional Policy for Gender Equality and Strategic Implementation Framework (2014-2023) of the Ministry of Agriculture, Livestock and Food (MAGA).

The Republic of Guatemala has also adopted different laws guaranteeing the integral and egalitarian development of women, including the Law to Bring Dignity and the Integral Promotion of Women (Decree 7-99, Article 2); the Law on Social Development (Decree 42-2001, Articles 4 and 16); the Law on Urban and Rural Development Councils (Decree 11-2002, Articles 2 and 6); and the Law on the National System for Food and Nutritional Security (Decree 32-2005, Article 4). Furthermore, with the purpose of ensuring compliance with all gender policies and guidelines, Government Agreement 260-2013 provides that all ministries and secretariats of the Executive Body should create within its organizational structure a Gender Unit – attached to the Head Office – in charge of providing technical advice for the institutionalization process of gender policies to ensure their compliance.



Methodological process followed to prepare this guide

This guide was designed through collaborative processes between the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) and Climate Change and Gender Units of the Ministry of Agriculture, Livestock and Food (MAGA), with financial support from the International Development Research Center (IDRC) and within the framework of the projects “Generating evidence on gender-sensitive climate-smart agriculture to inform policy in Central America (2018–2020)” and “Shaping equitable climate change policies for resilient food systems across Central America and the Caribbean”.

After the national participatory workshop held in October 2018 in Guatemala City – which provided spaces where climate change and gender focal points from different institutions shared common challenges in designing and monitoring climate change and gender issues – a need was identified to design an instrument to improve the work of program developers and extension agents in mainstreaming a gender perspective in climate change and CSA interventions.

After this demand, a comprehensive scientific literature review was conducted exploring the links among agriculture, food security, and climate change included in scientific studies and gray literature (technical material, case studies, research reports, etc.) placing the emphasis on the context of Guatemala. A total of 105 bibliographic references were consulted.

After that, we extracted, assessed, and compiled the actions and steps recommended to mainstream gender issues in climate change, agriculture, and food security programs and policies, adding the experience of studies and projects of the CCAFS research program and other partners of the CGIAR consortium. In particular, the content of the guide was developed upon de basics contained in the “Guidelines or other tools for integrating gender considerations into climate change related activities under the United Nations Framework Convention on Climate Change (UNFCCC, 2016)”, to which the recommendations, examples, and experiences found in the other documents were added at later stages. With the purpose of facilitating the work of users of this guide, the documents consulted were also divided in seven different themes, which allowed us to compile the tables with gender questions and indicators included in this guide: 1) Gender and water resources; 2) Gender

and agricultural practices for climate change adaptation and mitigation (CSA practices); 3) Gender and natural resource management; 4) Gender, food security, and nutrition; 5) Gender and climate services; 6) Gender and climate risk and natural disaster management; and 7) Gender and financial resources.

During the literature review process and initial approach to outline the content of this guide, CCAFS researchers in collaboration with the staff from the Gender and Climate Change Units at MAGA held two workshops in March 2019, where representatives of different directorates at MAGA and other national institutions (workshop on March 20, Guatemala City), and extension workers from MAGA and other NGOs and local institutions (workshop on March 21, Antigua Guatemala) identified the main bottlenecks to mainstream gender in their activities, validated the need to design a document to facilitate the work of climate change and gender initiative developers and extension workers, provided inputs to structure the guide and jointly devised a roadmap for the design and future implementation of this guide.

After considering the suggestions gathered in both workshops and the information collected through literature review, the first draft of the guide was developed. This draft was presented at a workshop held on May 30, 2019 in Antigua Guatemala, where representatives from different institutions and extension workers from MAGA reviewed the contents in a participatory fashion. A series of adjustments were suggested for terminology, content, and strengthening the multicultural approach in the guide, which were included in the final version and which allowed us to further adapt the document to the context and realities of Guatemala. A total of 22 institutions, along with independent representatives from the civil society, attended the participatory workshops organized within the framework of this guide.

The initiative of the guide was also presented at the meeting of the Gender Network of the Central American Agricultural Council (CAC), with the participation of representatives of the Secretariat of the Council of Ministers for Women of Central America and the Dominican Republic (COMMCA), which was held on March 22 in Guatemala City. The guide is expected to serve in the future as an input to be adapted to the context of other SICA countries.

